

IN THE CLAIMS:

Claim 1 (Currently Amended): A method of driving a liquid crystal display panel of a dot inversion system having liquid crystal cells arranged at intersections between a plurality of data lines and a plurality of gate lines in a matrix array, comprising the steps of:

supplying the data lines with (n-2)th data corresponding to the liquid crystal cells connected to an (n-2)th (m-2)th gate line, wherein m and n are integers both greater than or equal to 2;

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~~conducting a data supply channel for the liquid crystal cells connected to an nth gate line such that the (n-2)th data is supplied to the liquid crystal cells connected to the nth gate line;~~

conducting a first data supply supplying channel for the liquid crystal cells connected to the ~~nth~~ mth gate line such that the (n-2)th data is supplied to the liquid crystal cells connected to the ~~nth~~ mth gate line; and

conducting a second data supplying channel for the liquid crystal cells connected to the (n-2)th (m-2)th gate line such that the (n-2)th data is supplied to the liquid crystal cells connected to the (n-2)th (m-2)th gate line,

wherein conducting the first data supply supplying channel and conducting the second data supplying channel are performed simultaneously.

Claim 2 (Original): The method according to claim 1, wherein the liquid crystal cells connected to first and second gate lines of the plurality of gate lines are charged at every frame with data signals applied at a blanking interval.

Claim 3 (Original): The method according to claim 2, wherein polarity inversion of the data signals applied to the liquid crystal cells connected to the first and second gate lines is made in at least two clock time intervals prior to an application of an active data signal.

Claim 4 (Original): The method according to claim 2, wherein gate and data control signals for applying data to the liquid crystal cells connected to the first and second gate lines are applied in at least two clock time intervals before the gate and data control signals become effective data.

Claim 5 (Currently Amended): A driving apparatus for a liquid crystal display panel of dot inversion system having liquid crystal cells arranged at intersections between a plurality of data lines and a plurality of gate lines in a matrix array, comprising:

a data driving integrated circuit supplying data to the data lines of the liquid crystal display panel;

a gate driving integrated circuit responding to a gate start pulse to sequentially drive the gate lines of the liquid crystal display panel; and

a pre-charging controller continuously generating first and second gate start

pulses such that data corresponding to an (n-2)th data line is supplied to an nth data line, wherein n is an integer greater than or equal to 2, and applying the first and second gate start pulses to the gate driving integrated circuit.

Claim 6 (Original): The apparatus according to claim 5, wherein the pre-charging controller includes:

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a first input line supplied with a pre-gate start pulse and a second input line supplied with a data enable signal for controlling data output of the data driving integrated circuit;

first delay means for delaying the pre-gate start pulse from the first input line by one clock interval of the data enable signal;

second delay means for delaying the delayed pre-gate start pulse from the first delay means by one clock interval of the data enable signal; and

a gate device for executing an exclusive logical sum operation of the pre-gate start pulse from the first input line and an output signal of the second delay means to continuously output the first and second gate start pulses.

Claim 7 (Original): The apparatus according to claim 5, wherein the liquid crystal cells connected to the first and second gate lines of the liquid crystal display panel are charged at every frame interval with data signals applied at a blanking interval.

Claim 8 (Original): The apparatus according to claim 7, wherein polarity inversion of the data signals applied to the liquid crystal cells connected to the first and second gate lines is made in at least two clock time intervals prior to an application of an active data signal.

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Claim 9 (Original): The apparatus according to claim 7, wherein gate and data control signals for applying data to the liquid crystal cells connected to the first and second gate lines are applied in at least two clock time intervals before the gate and data control signals become effective data.

Claim 10 (Currently Amended): A device for driving a liquid crystal display panel having a plurality of data lines, a plurality of gate lines orthogonal to the plurality of data lines, and a plurality of liquid crystal cells, comprising:

a data driving integrated circuit supplying data to the data lines;

a gate driving integrated circuit responding to a gate start pulse to drive the gate lines; and

a pre-charging controller generating first and second gate start pulses to the gate driving integrated circuit, wherein data corresponding to an (n-2)th data line is supplied to an nth data line, wherein n is an integer greater than or equal to 2.

Claim 11 (Original): The device according to claim 10, wherein the liquid crystal cells connected to the first and second gate lines of the liquid crystal display panel are charged at every frame interval with data signals applied at a blanking interval.

Claim 12 (Original): The apparatus according to claim 10, wherein polarity inversion of the data signals applied to the liquid crystal cells connected to the first and second gate lines is made in at least two clock time intervals prior to an application of an active data signal.

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Claim 13 (Original): The apparatus according to claim 10, wherein gate and data control signals for applying data to the liquid crystal cells connected to the first and second gate lines are applied in at least two clock time intervals before the gate and data control signals become effective data.
